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A note on the construction of L-fold sparse tensor product spaces

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In the present paper, we consider the construction of general sparseătensor product spaces in arbitrary space dimensions whenăthe single subdomains are of different dimensionality and theassociated ansatz spaces possess different approximationăproperties. Our theory extends the results from Griebel and Harbrecht [Math. Comput., 82(282):975-994, 2013] forăthe construction of two-fold sparse tensor product space toăarbitrary *L*-fold sparse tensor product spaces.

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